

## EXHIBIT 11



## COMPOUND

Claim	'797 Claims	Use
Claim 1, lines 6-10	<p>creating at least one electronic parallel storage of a differences layer linked to a distributed computer ledger (DCL); the DCL contains an electronic transaction record by a time-sequenced value or a time-sequenced string;</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. PSDL (A1)</li> <li>2. PSDL (A1) linked (A2) to DCL (A2,A3)</li> <li>3. DCL (A2,A3) containing transaction records (A4), by</li> <li>4. time sequenced value or string (A5)</li> </ol>	<p><u>COMPUTER BASED METHOD – (A0)</u></p> <ol style="list-style-type: none"> <li>(1) “Compound is an algorithmic, autonomous interest rate protocol built for developers, to unlock a universe of open financial applications.” – homepage website “compound.finance”</li> <li>(2) “In this paper we introduce a decentralized protocol which establishes money markets with algorithmically set interest rates based on supply and demand, allowing users to frictionlessly exchange the time value of Ethereum assets.” - CCMP</li> </ol> <p><u>CREATING PARALLEL STORAGE OF A DIFFERENCE LAYER – (A1)</u></p> <ol style="list-style-type: none"> <li>(1) “Governance: Compound will begin with centralized control of the protocol (such as choosing the interest rate)” – CMMP</li> <li>(2) “Note that we calculate the exchangeRateStored for each collateral cToken using stored data, without calculating accumulated interest” – Compound Protocol Final</li> <li>(3) “Usually contracts that consume price feeds <i>read</i> the data from an AggregatorProxy contract, which itself reads the price from an underlying OffchainAggregator contract. – Oracle Infrastructure</li> <li>(4) “As both users, both assets, and prices are all contained within the Compound protocol, liquidation is frictionless and does not rely on any outside systems or order-books.” - CCMP</li> <li>(5) “The Compound protocol currently relies on a price feed, maintained by our team, to determine each user’s borrowing capacity and to measure liquidation thresholds.” (8/19/19, “The</li> </ol>

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		<p>Open Oracle System”, medium.com)</p> <p>(6) “Exchange Rate Stored - The last stored exchange rate for cTokens to underlying assets” – Compound Protocol Final</p> <p>(7) “Deviation threshold - when the off-chain price of an asset is witnessed to have moved more than x% of the previously reported price, an on-chain update is initiated.” - Compound Oracle Improvement 47</p> <p>(8) “The [interest rate] demand curve is codified through governance ...governance will begin with centralized control” - CMMP</p> <p>(9) “the history of each interest rate, for each money market, is captured by an Interest Rate Index, which is calculated each time an interest rate changes...” - CMMP</p> <p>(10) “The market history service retrieves historical information about a market. You can use this API to find out the values of interest rates at a certain point in time. Its especially useful for making charts and graphs of the time-series values.” – Compound API</p> <p><u>Note1</u>: a centralized computer system runs to gather and store both the price levels of assets (e.g. ETH, USDC), and changing interest rates relative to an asset.</p> <p><u>Note2</u>: processing use of prices and rates (including the determination of prices and rates) requires storage. This storage and processing is separate from the DCL as described by Compound’s use of “centralized”, “Comptroller”, “off-chain”, and post-Chainlink integration, node local storage</p> <p><u>DCL (cToken) IS ETHEREUM ERC-20 – (A2)</u></p> <p>(1) “assets supplied to a market are represented by an ERC-20 token balance (“cToken”) which entitles the owner to an increasing quantity of the underlying asset” - CMMP</p>

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		<p>(2) "Each money market is unique to an Ethereum asset (such as Ether, an ERC-20 stablecoin) ....and contains a transparent and publically-inspectable ledger with a record of all transactions ..." – CMMP</p> <p><u>Note1</u>: created and imputed cTokens are technically consistent with their source asset, and both the cTokens and assets reside on a decentralized ledger.</p> <p><u>Note2</u>: cToken conversion quantities are linked to the stored interest rates.</p> <p><u>DCL IS DISTRIBUTED – (A3)</u></p> <p>(1) "Note that we calculate the exchangeRateStored for each collateral cToken using stored data, without calculating accumulated interest" – Compound Protocol Final</p> <p>(2) "Everyone who participates in the Ethereum network (every Ethereum node) keeps a copy of the state of this computer. Additionally, any participant can broadcast a request for this computer to perform arbitrary computation. Whenever such a request is broadcast, other participants on the network verify, validate, and carry out ("execute") the computation. This causes a state change in the EVM, which is committed and propagated throughout the entire network." - Intro to Ethereum</p> <p><u>Note1</u>: from '797 (col. 1, lines 42-48), "A distributed computer ledger (DCL) system is where all nodes are independently connected.... which is proofed for accuracy by a consensus system running on the decentralized network"</p> <p><u>DCL ELECTRONIC TRANSACTION RECORD – (A4)</u></p> <p>(1) "The Block. The block in Ethereum is the collection of relevant pieces of information (known as the block header ), H, together with information corresponding to the comprised transactions, T, and a set of other block headers U that are known to have a parent equal to the present block's parent's parent (such blocks are known as ommers)" - EYP</p>

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		<p>(2) “Essentially, each transaction in the block must provide a valid state transition from what was the canonical state before the transaction was executed to some new state. Note that the state is not encoded in the block in any way; it is purely an abstraction to be remembered by the validating node and can only be (securely) computed for any block by starting from the genesis state and sequentially applying every transaction in every block.” - EWP</p> <p><b><u>DCL TIME-SEQUENCED – (A5)</u></b></p> <p>(1) “timestamp: A scalar value equal to the reasonable output of Unix’s time() at this block’s inception” - EYP</p> <p>(2) “Essentially, each transaction in the block must provide a valid state transition from what was the canonical state before the transaction was executed to some new state. Note that the state is not encoded in the block in any way; it is purely an abstraction to be remembered by the validating node and can only be (securely) computed for any block by starting from the genesis state and sequentially applying every transaction in every block.” - EWP</p> <p><a href="#">Note1: the Ethereum ERC-20 blockchain uses an “incrementing nonce” (a scalar value) to sequence the recording of transactions (see Ethereum Yellow Paper)</a></p> <p><a href="#">Note2: Ethereum block identifiers and transaction records are immutably sequenced.</a></p>
Claim 1, lines 11-19	<p>accessing and storing a value through the at least one electronic parallel storage of the differences layer, the value from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential, wherein at least one differences processing engine running on a specialized computer system creates and stores parameters from a group comprised of a measurement differences and a descriptive differences;</p> <p>NOTES:</p>	<p><b><u>VALUE ACCESS &amp; STORAGE THROUGH PSDL – (B1)</u></b></p> <p>(1) “the price of each asset is a median of prices from CoinbasePro, Bitnex, Poloniex...” (Compound Finance website, FAQ)</p> <p>(2) “Compound protocol delegates the ability to set the value of assets to a committee which pools prices from the top 10 exchanges” – CCMP</p>

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	<ol style="list-style-type: none"> <li>1. access and store a value (B1, B2), through</li> <li>2. PSDL (A1, B1, B2)</li> <li>3. value is time sequenced stream (B1) or descriptor (B2)</li> <li>4. compute and store differences (A1, B1, B2)</li> </ol>	<p>(3) "The Compound protocol currently relies on a price feed, maintained by our team, to determine each user's borrowing capacity and to measure liquidation thresholds." - Open Oracle</p> <p>(4) "Note that we calculate the exchangeRateStored for each collateral cToken using stored data, without calculating accumulated interest" – Compound Protocol Final</p> <p>(5) "Usually contracts that consume price feeds <i>read</i> the data from an AggregatorProxy contract, which itself reads the price from an underlying OffchainAggregator contract. – Oracle Infrastructure</p> <p>(6) "This proposal will change the current oracle system from using Coinbase as the primary reporter of prices to Chainlink Price Feeds." - Compound Oracle Improvement 47</p> <p>(7) "This API reference provides information on how to interact directly with the Chainlink node – {see local node host <a href="http://localhost:6688">http://localhost:6688</a>, and key "USD" and value "28077"} (Chainlink Developers Documentation – API)</p> <p>(8) "CLIENT_NODE_URL – default <a href="http://localhost:6688">http://localhost:6688</a>" -Chainlink Developers Documentation – API</p> <p>(9) "The transaction can be found in the transaction history of Chainlink node.... The same transaction can be found in the dashboard of the external adapter in Google Cloud Function." - Bridging Blockchain</p> <p>(10)"<u>Run Result</u>: A Run Result is the result of executing a Job Spec or Task Spec. A Run Result is made up of a JSON blob, a Run Status, and an optional error field. Run Results are stored on Job Runs and Task Runs." (Developers Glossary</p> <p>(11)"The history of each interest rate, for each money market, is captured by an Interest Rate Index, which is calculated each time an interest rate changes..." - CMMP</p>

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		<p>(12) "A Price Oracle maintains the current exchange rate of each supported asset...pools prices from the top 10 exchanges...used to determine a borrowing capacity and collateral requirements..." - CMMP</p> <p>(13) "Price Oracle Contract - The Compound Protocol uses prices from a smart contract called a price oracle. The Comptroller and Liquidate Borrow functions reference the prices in this oracle. Multiple oracles may exist for the different Compound markets." – Compound Protocol Final</p> <p>(14) "sumCollateral – Note: we use the stored exchange rate here, instead of calculating a new exchange rate for each collateral asset." – Compound Protocol Final</p> <p>(15) "The Open Oracle is a standard and SDK allowing reporters to sign key-value pairs (e.g. a price feed) that interested users can post to the blockchain. The system has a built-in view system that allows clients to easily share data and build aggregates (e.g. the median price from several sources)." (compound-finance/open-oracle) – Github Open Oracle</p> <p>(16) "The Open Price Feed accounts price data for the Compound protocol. The protocol's Comptroller contract uses it as a source of truth for prices. Prices are updated by Chainlink Price Feeds. The codebase is hosted on GitHub, and maintained by the community." (compound-finance/open-oracle)</p> <p>(17) If valid, the UniswapAnchoredView is updated with the asset's price. If invalid, the price data is not stored (Open Price Feed)</p> <p>(18) "UniswapAnchoredView only stores prices that are within an acceptable bound of the Uniswap time-weighted average price and are signed by a reporter. Also contains logic that upscales the posted prices into the format that Compound's Comptroller expects." (Open Price Feed)</p> <p><a href="#">Note1: prices and price feeds are time sequenced</a>  <a href="#">Note2: differences are processed and stored to maintain borrowing</a></p>

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		<p>capacity and collateral requirements  <u>Note3:</u> a system is calculating statistics (e.g. changes in interest rates, borrowing capacity, and median values) from streaming data</p> <p><u>VALUE DESCRIPTIVE – (B2)</u></p> <p>(1) “Each money market is unique to an Ethereum asset (such as Ether, an ERC-20 stablecoin....and contains a transparent and publically-inspectable ledger with a record of all transactions ...” – CMMP</p> <p>(2) “each cToken also has a comptroller, which are currently all set to address (“Code”) - CCMP</p> <p><u>Note:</u> each cToken is descriptively linked to its Ethereum asset and descriptively different and distinguished from other tokens on the Ethereum blockchain.</p>
Claim 1, lines 20-28	<p>storing the DCL containing an electronic transactions record on at least one of a distributed network of connected independent computers or a decentralized network of computers wherein the electronic transaction record is time sequenced, and a writing or an appending of the electronic transaction records is performed on the distributed network of connected independent computers or the decentralized network of computers;</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. store DCL on distributed or decentralized (C1),</li> <li>2. transaction records (A4) are time sequenced (A4, A5),</li> <li>3. writing or appending is performed on distributed or decentralized (C1, C2)</li> </ol>	<p><u>DCL DECENTRALIZED OR DISTRIBUTED – (C1)</u></p> <p>(1) “cTokens conform to the ERC-20 standard, and work just like other assets.” - cTokens</p> <p>(2) “Everyone who participates in the Ethereum network (every Ethereum node) keeps a copy of the state of this computer. Additionally, any participant can broadcast a request for this computer to perform arbitrary computation. Whenever such a request is broadcast, other participants on the network verify, validate, and carry out (“execute”) the computation. This causes a state change in the EVM, which is committed and propagated throughout the entire network.” - Intro to Ethereum</p> <p><u>DCL TRANSACTION RECORDS, WRITING/APPENDING – (C2)</u></p> <p>(1) “Essentially, each transaction in the block must provide a valid state transition from what was the canonical state before the transaction was executed to some new state. Note that the state is not encoded in the block in any way; it is purely an abstraction to be remembered by the validating node and can only be (securely) computed for any block by starting from the genesis</p>



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		<p>state and sequentially applying every transaction in every block.” - EWP</p> <p>see Ethereum White Paper – see the terms “transaction list”, “blocks”, “block number”, and “adjacent blocks” (EWP) and see “writing” and “transactions are recorded into each block of the blockchain” (EYP)</p>
Claim 1, lines 29-36	<p>storing the at least one electronic parallel storage of the differences layer on at least one of a centralized storage device controlled by the specialized computer system or a decentralized storage device controlled by the specialized computer system for increasing functionality and utility of the DCL, reducing data storage requirements, eliminating transmission of redundant data, and improving data security;</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. storing PSDL (A1) on centralized or decentralized (A1)</li> <li>2. increasing functionality, utility of DCL (D1)</li> <li>3. reducing data storage, redundant transmission (D2)</li> <li>4. increase data security (D2)</li> </ol>	<p><b><u>INCREASED FUNCTIONALITY AND UTILITY – (D1)</u></b></p> <ol style="list-style-type: none"> <li>(1) “Useful Collateral – By holding or receiving a cToken, you can borrow from the Compound protocol” from website: (compound.finance/ctokens)</li> <li>(2) “In order to determine how much interest has accumulated, we take the current index value and compare it to the interest index at the time of the last event which was stored in the borrow balance” – Compound Protocol Final</li> <li>(3) “We keep a small residual of all interest that moves through the system”-CEO (CEO interview, Coindesk, “Crypto Money Market Compound Lets HODL and Earn”, 9/27/2018)</li> <li>(4) “sumCollateral – Note: we use the stored exchange rate here, instead of calculating a new exchange rate for each collateral asset.” – Compound Protocol Final</li> </ol> <p><b><u>DCL –REDUCED STORAGE, REDUNDANT DATA, DATA SECURITY – (D2)</u></b></p> <ol style="list-style-type: none"> <li>(1) “...the developer of the protocol, currently controls the Ethereum address [-], which is the protocol admin. (Compound FAQ, 12/5/18)</li> <li>(2) “The admin account executes a transaction that eventually calls a malicious external contract (e.g., a malicious price oracle or underlying asset token). The malicious contract reentrantly calls a privileged function within the Comptroller (e.g., to set the close factor or change the price oracle). The call to adminOrInitializing() will return true, allowing the transaction to succeed.” – Compound V2 Security Assessment</li> </ol>

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		<p>(3) "Deviation threshold - when the off-chain price of an asset is witnessed to have moved more than x% of the previously reported price, an on-chain update is initiated." - Compound Oracle Improvement 47</p> <p>(4) "Compound money markets are defined by an interest rate, applied to all borrowers uniformly which adjust over time..." - CMMP</p> <p>(5) "A Price Oracle maintains the current exchange rate of each supported asset...pools prices from the top 10 exchanges...used to determine a borrowing capacity and collateral requirements... (CMMP)</p> <p>(6) "The Open Price Feed accounts price data for the Compound protocol. The protocol's Comptroller contract uses it as a source of truth for prices. Prices are updated by Chainlink Price Feeds. The codebase is hosted on GitHub, and maintained by the community." (compound-finance/open-oracle)</p> <p>(7) "Compound will begin with centralized control of the protocol (such as choosing the interest rate)" - CMMP</p> <p>(8) "The [interest rate] demand curve is codified through governance ...governance will begin with centralized control" - CMMP</p> <p>(9) "the history of each interest rate, for each money market, is captured by an Interest Rate Index, which is calculated each time an interest rate changes..." - CMMP</p> <p><a href="#">Note: selective centralization is used to control for security in interest rate settings and borrowing/lending limits.</a>  <a href="#">Note: centralization is used to maintain security on borrowing/lending</a>  <a href="#">Note" selective centralization reduces redundant overhead on blockchains</a></p>
Claim 1, lines 37-40	linking the electronic transaction record in the DCL to records of the at least one electronic parallel storage of the	<u>LINK</u> – (E1)

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	<p>differences layer utilizing at least one time sequenced value, string, code, or key; and</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. link (E1) DCL transaction records (A2, A4) to PSDL records (A1, B1, B2),</li> <li>2. utilizing time seq. value, string, code, or key (E1)</li> </ol>	<ol style="list-style-type: none"> <li>(1) "Governance: Compound will begin with centralized control of the protocol (such as choosing the interest rate)" - CMMP</li> <li>(2) "Each asset supported on the Compound market has a corresponding USD-paired price feed reference contract and a validatorProxy contract (which allows for the UniswapAnchorView (UAV) oracle contract to be updated by the community as new markets are added)." - Compound Oracle Improvement 47</li> <li>(3) "each cToken also has a comptroller, which are currently all set to address ("Code")" - see CCMP</li> <li>(4) "Note that we calculate the exchangeRateStored for each collateral cToken using stored data, without calculating accumulated interest" – Compound Protocol Final</li> <li>(5) "When a borrow is created, we store with it the principal amount and the interest index at that time." – Compound Protocol Final</li> <li>(6) each cToken has an administrator and is linked to the administrator through a distinct blockchain address ("Ethereum Code") – i.e. a string, code, and key - CCMP</li> <li>(7) Exchange Rate Stored - The last stored exchange rate for cTokens to underlying assets" – Compound Protocol Final</li> <li>(8) "Let assets(account) be the active list of assets (from storage) that a user has entered" – Compound Protocol Final</li> <li>(9) "A job needs to be registered on a Chainlink node using the job spec. After registration, a unique job ID is provided by the node. This is the identifier to use for the client to request for the execution to occur." - How Chainlink Works</li> <li>(10) "At the current release level, Job IDs are uniquely generated each time it's deployed. Therefore every data request has a pre-</li> </ol>

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		<p>determined Chainlink node that can fulfill it. In other words, Chainlink has yet fully implemented the decentralized nature of the original design.” - How Chainlink Works</p> <p>(11)“The Chainlink nodes rely on “Job Id” to recognize the required adapter to interact with and the workflow to process the data” - Bridging Blockchain</p>
Claim 1, lines 41-44	<p>imputing at least one measured differential with a descriptive identifier or at least one descriptive identifier to the electronic transaction record of the DCL through data storage and processing on the at least one electronic parallel storage of the differences layer.</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. impute differential or descriptor to DCL records (F1) through,</li> <li>2. data storage and processing on PSDL (A1, B1, B2)</li> </ol>	<p><b><u>DCL IMPUTING MEASURED DIFFERENTIAL OR DESCRIPTIVE ID. – (F1)</u></b></p> <ol style="list-style-type: none"> <li>(1) “assets supplied to a market are represented by an ERC-20 token balance (“cToken”) which entitles the owner to an increasing quantity of the underlying asset” – CMMP</li> <li>(2) “Deviation threshold - when the off-chain price of an asset is witnessed to have moved more than x% of the previously reported price, an on-chain update is initiated.” - Compound Oracle Improvement 47</li> <li>(3) “Compound money markets are defined by an interest rate, applied to all borrowers uniformly which adjust over time...” - CMMP</li> <li>(4) “...as the market earns interest, its cToken becomes convertible into an increasing quantity of the underlying asset” - CMMP</li> <li>(5) “Heartbeat threshold - If x minutes have passed without an update, a new on-chain update is initiated.” - Compound Oracle Improvement 47</li> </ol>

Bridging Blockchain – “Bridging Blockchain to the Real World using Chainlink”, medium.com, Fang Gong, Apr. 29, 2019

CCMP – The Compound Money Market Protocol, Version 1.0, Feb 2019, <https://compound.finance/documents/Compound.Whitepaper.pdf>

CEO Interview – Coindesk, “Crypto Money Market Compound Lets HODL and Earn”, 9/27/2018 - <https://www.coindesk.com/crypto-money-market-compound-lets-you-hodl-and-earn-interest>

Chainlink Developers Documentation – “Chainlink Node API”, <https://docs.chain.link/reference#runs>

Compound API Introduction, <https://compound.finance/docs/api>

compound-finance/open-oracle, <https://github.com/compound-finance/open-oracle>

Compound Protocol Final – Compound Protocol [Final] Version 2.1, <https://github.com/compound-finance/compound-protocol/blob/master/docs/CompoundProtocol.pdf>

Compound Oracle Improvement 47, passed, executed June 21, 2021, <https://compound.finance/governance/proposals/47>

Compound V2 Security Assessment, <https://github.com/trailofbits/publications/blob/master/reviews/compound-2.pdf>

cTokens – cTokens Introduction, <https://compound.finance/docs/ctokens>

Developers Glossary – Chainlink Developers Documentation – Glossary, <https://docs.chain.link/docs/glossary#config>

EWP – Ethereum White Paper - <https://github.com/ethereum/wiki/wiki/White-Paper>

EYP – Ethereum Yellow Paper - <https://ethereum.github.io/yellowpaper/paper.pdf>

FAQ - The Compound Money Market Protocol FAQs

Github Open Oracle - <https://github.com/compound-finance/open-oracle>

How Chainlink Works – “How Chainlink Works Under the Covers”, Kaleido, Jim Zhang, Feb.12, 2020, <https://www.kaleido.io/blockchain-blog/how-chainlink-works-under-the-covers>

Intro to Ethereum, “Intro to Ethereum”, Ethereum.Org, Nov. 10, 2020, <https://ethereum.org/en/developers/docs/intro-to-ethereum/>

Open Oracle – “The Open Oracle System”, published by Compound in medium.com, Aug. 19, 2019

Open Price Feed – “Open Price Feed Introduction”, <https://compound.finance/docs/prices>

Oracle Infrastructure, Chainlink Proposal, <https://www.comp.xyz/t/oracle-infrastructure-chainlink-proposal/1272/55>



## NON-LIMITING AND NON-EXHAUSTIVE

### COMPOUND

Claim	'797 Claims	Use
Claim 7, lines 18-23	<p>a system having a memory device, the memory device further including a Random Access Memory (RAM);</p> <p>a processor connected to the memory device, the processor is configured to:</p> <p>create at least one electronic parallel storage of a differences layer linked to a distributed computer ledger (DCL), both the electronic parallel storage of the differences layer and the DCL containing a respective electronic transaction record, a time-sequenced value, or a time-sequenced string;</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. a system (A1)</li> <li>2. create PSDL (A2)</li> <li>3. linked (A3) to a DCL (A4, A5)</li> <li>4. PSDL (transactions, or value, or string) (A1, A2)</li> <li>5. DCL (transactions, or value, or string) (A6)</li> </ol>	<p><u>SYSTEM – (A1)</u></p> <ol style="list-style-type: none"> <li>(1) “Compound is an algorithmic, autonomous interest rate protocol built for developers, to unlock a universe of open financial applications.” – compound.finance DAO homepage website</li> <li>(2) “The Compound protocol currently relies on a price feed, maintained by our team, to determine each user’s borrowing capacity and to measure liquidation thresholds.” (8/19/19, “The Open Oracle System”, medium.com) – Open Oracle</li> <li>(3) “Each money market is unique to an Ethereum asset (such as Ether, an ERC-20 stablecoin)....and contains a transparent and publicly-inspectable ledger with a record of all transactions ...” - CMMP</li> <li>(4) “Comptroller: The Compound protocol does not support specific tokens by default; instead, markets must be whitelisted. This is accomplished with an admin function...” - CMMP</li> <li>(5) “Governance: Compound will begin with centralized control of the protocol” - CMMP</li> </ol> <p><u>CREATE PARALLEL STORAGE OF A DIFFERENCES LAYER (PSDL) – (A2)</u></p> <ol style="list-style-type: none"> <li>(1) “Governance: Compound will begin with centralized control of the protocol” – CMMP</li> <li>(2) “As both users, both assets, and prices are all contained within the Compound protocol, liquidation is frictionless and</li> </ol>

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		<p>does not rely on any outside systems or order-books.” - CCMP</p> <p>(3) “Note that we calculate the exchangeRateStored for each collateral cToken using stored data, without calculating accumulated interest” – Compound Protocol Final</p> <p>(4) “Usually contracts that consume price feeds <i>read</i> the data from an AggregatorProxy contract, which itself reads the price from an underlying OffchainAggregator contract. – Oracle Infrastructure</p> <p>(5) “A Price Oracle maintains the current exchange rate of each supported asset...pools prices from the top 10 exchanges ...used to determine a borrowing capacity and collateral requirements... - CMMP</p> <p>(6) “Exchange Rate Stored - The last stored exchange rate for cTokens to underlying assets” – Compound Protocol Final</p> <p>(7) “the history of each interest rate, for each money market, is captured by an Interest Rate Index, which is calculated each time an interest rate changes...” - CMMP</p> <p>(8) The Compound protocol currently relies on a price feed, maintained by our team, to determine each user’s borrowing capacity and to measure liquidation thresholds. (8/19/19 – Open Oracle) – Open Oracle</p> <p>(9) The Compound protocol does not support specific tokens by default; instead, markets must be whitelisted. This is accomplished with an admin function, ....” - CMMP</p> <p>(10)The Open Oracle is a standard and SDK allowing reporters to sign key-value pairs (e.g. a price feed) that interested users can post to the blockchain. The system has a built-in view system that allows clients to easily share data and build aggregates (e.g. the median price from several sources). (compound-finance/open-oracle) – Github Open Oracle</p>

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		<p><u>PSDL LINKED TO A DISTRIBUTED COMPUTER LEDGER – (A3)</u></p> <p>(1) “Each money market is unique to an Ethereum asset (such as Ether, an ERC-20 stablecoin....and contains a transparent and publically-inspectable ledger with a record of all transactions ...” (CMMP)</p> <p>(2) “assets supplied to a market are represented by an ERC-20 token balance (“cToken”) which entitles the owner to an increasing quantity of the underlying asset” (CMMP)</p> <p><u>DCL (cToken) IS ETHEREUM ERC-20 – (A4)</u></p> <p>(1) “assets supplied to a market are represented by an ERC-20 token balance (“cToken”) which entitles the owner to an increasing quantity of the underlying asset” - CMMP</p> <p>(2) “Each money market is unique to an Ethereum asset (such as Ether, an ERC-20 stablecoin) ....and contains a transparent and publically-inspectable ledger with a record of all transactions ...” - CMMP</p> <p>(3) “The Block. The block in Ethereum is the collection of relevant pieces of information (known as the block header ), H, together with information corresponding to the comprised transactions, T, and a set of other block headers U that are known to have a parent equal to the present block’s parent’s parent (such blocks are known as ommers)” - EYP</p> <p><u>Note: created and imputed cTokens are technically consistent their source asset, and both the cTokens and assets reside on a decentralized ledger.</u></p> <p><u>DCL IS DISTRIBUTED – (A5)</u></p> <p>(1) “Note that we calculate the exchangeRateStored for each collateral cToken using stored data, without calculating accumulated interest” – Compound Protocol Final</p> <p>(2) “Everyone who participates in the Ethereum network (every</p>



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		<p>Ethereum node) keeps a copy of the state of this computer. Additionally, any participant can broadcast a request for this computer to perform arbitrary computation. Whenever such a request is broadcast, other participants on the network verify, validate, and carry out (“execute”) the computation. This causes a state change in the EVM, which is committed and propagated throughout the entire network.” - Intro to Ethereum</p> <p><a href="#">Note1</a>: from '797 (col. 1, lines 42-48), “A distributed computer ledger (DCL) system is where all nodes are independently connected ....which is proofed for accuracy by a consensus system running on the decentralized network”</p> <p><b><u>DCL ELECTRONIC TRANSACTION RECORD – (A6)</u></b></p> <p>(1) “Essentially, each transaction in the block must provide a valid state transition from what was the canonical state before the transaction was executed to some new state. Note that the state is not encoded in the block in any way; it is purely an abstraction to be remembered by the validating node and can only be (securely) computed for any block by starting from the genesis state and sequentially applying every transaction in every block.” - EWP</p> <p>Source: See Ethereum White Paper – the terms “transaction” and “state transitions” (EWP)  Source: See Ethereum Yellow Paper – “a secure decentralized generalized transaction ledger” (EYP)</p>
Claim 7, lines 24-26	<p>access a value from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential;</p> <p><b>NOTES</b></p> <ol style="list-style-type: none"> <li>1. access a value (B1, B2),</li> <li>2. ...at least one published data stream (B1) ...at least one descriptive differential (B2)</li> </ol>	<p><b><u>ACCESS A VALUE / DATA STREAM – (B1)</u></b></p> <p>(1) “The Compound protocol currently relies on a price feed, maintained by our team, to determine each user’s borrowing capacity and to measure liquidation thresholds.” (8/19/19, “The Open Oracle System”, medium.com) – Open Oracle</p> <p>(2) “A Price Oracle maintains the current exchange rate of each supported asset...pools prices from the top 10 exchanges ...used to determine a borrowing capacity and collateral</p>

Claim	'797 Claims	Use
		<p>requirements..." - CMMP</p> <p>(3) "We keep a small residual of all interest that moves through the system"-CEO (CEO interview, Coindesk, "Crypto Money Market Compound Lets HODL and Earn", 9/27/2018) – CEO Interview</p> <p>(4) "This proposal will change the current oracle system from using Coinbase as the primary reporter of prices to Chainlink Price Feeds." - Compound Oracle Improvement 47</p> <p>(5) "A Price Oracle maintains the current exchange rate of each supported asset...pools prices from the top 10 exchanges...used to determine a borrowing capacity and collateral requirements..." - CMMP</p> <p><u>ACCESS A VALUE / DESCRIPTOR – (B2)</u></p> <p>(1) "Each money market is unique to an Ethereum asset (such as Ether, an ERC-20 stablecoin....and contains a transparent and publically-inspectable ledger with a record of all transactions ..." - CMMP</p> <p>(2) "Comptroller: The Compound protocol does not support specific tokens by default; instead, markets must be whitelisted. This is accomplished with an admin function, ..." – CMMP</p> <p>Note: each Ethereum asset is a descriptive difference from the native Ethereum with differing system operation from native Ethereum and each other.</p>
Claim 7, lines 27-31	<p>store the values from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential on the at least one electronic parallel storage of the differences layer;</p> <p>NOTES</p> <p>1. store values on PSDL (C1)</p>	<p><u>STORE VALUES ON THE PSDL – (C1)</u></p> <p>(1) "Compound will begin with centralized control of the protocol (such as choosing the interest rate)" (CMMP)</p> <p>(2) "Note that we calculate the exchangeRateStored for each collateral cToken using stored data, without calculating</p>

Claim	'797 Claims	Use
	<p>2. ...at least one time-sequenced data stream...at least one descriptive differential (C1)</p>	<p>accumulated interest” – Compound Protocol Final</p> <p>(3) ““sumCollateral – Note: we use the stored exchange rate here, instead of calculating a new exchange rate for each collateral asset.” – Compound Protocol Final</p> <p>(4) “Usually contracts that consume price feeds <i>read</i> the data from an AggregatorProxy contract, which itself reads the price from an underlying OffchainAggregator contract. – Oracle Infrastructure</p> <p>(5) “This API reference provides information on how to interact directly with the Chainlink node – {see local node host <a href="http://localhost:6688">http://localhost:6688</a>, and key “USD” and value “28077”} - Chainlink Developers Documentation – API</p> <p>(6) “The transaction can be found in the transaction history of Chainlink node.... The same transaction can be found in the dashboard of the external adapter in Google Cloud Function.” - Bridging Blockchain</p> <p>(7) “CLIENT_NODE_URL – default <a href="http://localhost:6688">http://localhost:6688</a>” - Chainlink Developers Documentation – API</p> <p>(8) “the history of each interest rate, for each money market, is captured by an Interest Rate Index, which is calculated each time an interest rate changes...” - CMMP</p> <p>(9) “the price of each asset is a median of prices from CoinbasePro, Bitnex, Poloniex...” - compound.finance FAQ</p> <p>(10) “The Compound protocol currently relies on a price feed, maintained by our team, to determine each user’s borrowing capacity and to measure liquidation thresholds.” (8/19/19, “The Open Oracle System”, medium.com) – Open Oracle</p> <p>(11) “We keep a small residual of all interest that moves through the system”-CEO (CEO interview, Coindesk, “Crypto Money Market Compound Lets HODL and Earn”, 9/27/2018) – CEO</p>

Claim	'797 Claims	Use
		Interview
Claim 7, lines 32-36	<p>align and link a stored value record of the at least one electronic parallel storage of the differences layer to the electronic transaction record of the DCL utilizing at least one time sequenced value, string, code, or key; and</p> <p>NOTE</p> <ol style="list-style-type: none"> <li>1. align and link PSDL stored value to DCL (D1),</li> <li>2. utilizing time esq. value, string, code, or key (D1, A6)</li> </ol>	<p><u>ALIGN AND LINK – (D1)</u></p> <ol style="list-style-type: none"> <li>(1) “Compound will begin with centralized control of the protocol (such as choosing the interest rate)” - CMMP</li> <li>(2) “Compound money markets are defined by an interest rate, applied to all borrowers uniformly which adjust over time...” - CMMP</li> <li>(3) “Each asset supported on the Compound market has a corresponding USD-paired price feed reference contract and a validatorProxy contract (which allows for the UniswapAnchorView (UAV) oracle contract to be updated by the community as new markets are added).” - Compound Oracle Improvement 47</li> <li>(4) “Let assets(account) be the active list of assets (from storage) that a user has entered” – Compound Protocol Final</li> <li>(5) “...as the market earns interest, its cToken becomes convertible into an increasing quantity of the underlying asset”... - CMMP</li> <li>(6) “...while computing interest, a function of time” - CMMP</li> <li>(7) “A job needs to be registered on a Chainlink node using the job spec. After registration, a unique job ID is provided by the node. This is the identifier to use for the client to request for the execution to occur.” - How Chainlink Works</li> </ol>
Claim 7, lines 37-40	<p>impute at least one measured differential with a descriptive identifier or at least one descriptive identifier to the electronic transaction record of the DCL.</p> <p>NOTES</p> <ol style="list-style-type: none"> <li>1. impute measured differential (E1)</li> </ol>	<p><u>IMPUTE MEASURED DIFFERENCE – (E1)</u></p> <ol style="list-style-type: none"> <li>(1) “assets supplied to a market are represented by an ERC-20 token balance (“cToken”) which entitles the owner to an increasing quantity of the underlying asset” - CMMP</li> <li>(2) “...as the market earns interest, its cToken becomes convertible into an increasing quantity of the underlying asset” - CMMP</li> </ol>

Claim	'797 Claims	Use
		<p>(3) "Deviation threshold - when the off-chain price of an asset is witnessed to have moved more than x% of the previously reported price, an on-chain update is initiated." - Compound Oracle Improvement 47</p> <p>(4) "Compound money markets are defined by an interest rate, applied to all borrowers uniformly which adjust over time..." (CMMP)</p> <p>(5) "cTokens accumulates interest through their exchange rate – over time, each cToken becomes convertible into an increasing amount of its underlying asset, even while the number of cTokens in your wallet stays the same." – compound.finance website FAQ</p>

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